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AUTHOR

Miller, Rowland S.

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ABSTRACT

The reactions of observers (N=168 college students) to an actor's embarrassment were examined by manipulating the perceived link between actor and observer (cooperative, competitive, cr independent) and the observational set of the observer (empathic or nonempathic). The observers' self-ratings of embarrassment and measures of their skin potential indicated that a cooperative link and an empathic set both increased their responsiveness to the actor's plight. Moreover, independent empathic observers reported reactions which are believed to be empathic embarrassment--embarrassment felt for another even though one's own social identity is not threatened. Embarrassment appears to affect observers of, as well as participants in, embarrassing actions, and is a rather omnibus phenomenon. The momentary threats to an actor's "face" from which embarrassment stems seem to influence both the actor and his/her audience: if the audience members can identify with the actor, they may themselves be embarrassed by the actor's situation. (Author)



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Empathic Embarrassment:
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Rowland S. Miller Sam Houston State University

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Empathic Embarrassment:

Reactions to the Embarrassment of Another

Embarrassmert is that uncomfortable state of Problem: mortification, awkwardness, abashment, and chagrin that can result whenever unexpected incidents threaten one's social identity of "face" in an interaction (Goffman, 1956); we know it to be an aversive state of both psychological and physiological arousal (Brown, 1970; Buck, Parke, & Buck, 1970). However, previous studies of embarrassment have focused solely on the flustered reactions of <u>actors</u> who find themselves in embarrassing predicaments. Recent studies of empathy--the emotional reaction of observers to the emotions of others--suggest that observers of another's embarrassment may also be discomfited at times by their recognition of the other's plight. For instance, Stotland (1969) has shown that empathic observers told to concentrate on an actor's feelings react more strongly, both physically and subjectively, to the actor's apparent pain than do other observers instructed to simply watch carefully. Similarly, Krebs (1975) has demonstrated that empathic observers exhibit greater physiological reactions to an actor's wins and losses than do nonempathic observers.

Thus, it seems possible that observers may sometimes react to the embarrassing predicament of another with an empathic embarrassment, feeling embarrassed with the actor even though the other's actions do not reflect upon the observer and the observer's social identity is not endangered. One might expect parents to be embarrassed by the improprieties of their child because of the obvious link between them; indeed, the "faces" of



"team" members are often interdependent (Goffman, 1956). However, if truly empathic embarrassment exists, it should be possible to feel it for anyone with whom one can identify oneself, whether that person is known to the observer or not.

The present study examined the reactions of observers to an actor's embarrassment, manipulating the perceived link between actor and observer and the observational set of the observer. It was expected that empathic observers would react more strongly to the actors' embarrassment than would nonempathic observers. Further, it was expected that observers who had cooperated with the actors on an earlier task would be most responsive to the actors' plight, while observers who had maintained their independence or who had competed with the actors would be less responsive. Empathic embarrassment would be best illustrated, it was believed, if the observers shared the actors' embarrassment in the cell of the design in which independent actors and observers had neither cooperated nor competed—minimizing the link between them—and in which observers were asked to concentrate on the actors' feelings.

Subjects: Eighty four male and 84 female college students participated in partial fulfillment of a course requirement.

<u>Procedure</u>: Subjects reported to the laboratory in same-sex pairs and were told that the study was investigating physiological changes during impression formation. They were informed that after a short task one of them would watch the other perform a variety of tasks while the observer's physiological reactions were recorded.

After agreeing to this procedure, the subjects were randomly assigned to one of three interaction conditions. All subjects engaged in



a task modelled after that of Wolosin, Sherman, and Till (1973), but the task instructions were varied in order to induce a particular interactional set among the subjects. Those assigned to the <u>Cooperation condition</u> were told that they should try to match their partner's responses and that the two of them would receive a single, joint score. Subjects in the <u>Independence condition</u> were told not to let the other persor influence them and that they would each receive their cwn individual score. Finally, <u>Competition condition</u> subjects were instructed to try to avoid their rival's responses, and were told that theirs was a competitive task, and that one of them would win and the other would lose. In all three conditions the actual amount of interaction between the subjects was the same—the subjects answered the task questions individually—and no feedback concerning their performances was ever given.

After the subjects completed the task, a coin flip decided which of them was to be the <u>Actor</u> and which the <u>Observer</u>. The observer was then taken to an adjoining room where he/she could view the actor through a one-way mirror and hear the actor over headphones. Beckman Ag/AgCl electrodes capable of measuring skin potential were attached to the subject's right palm and forearm and the subject was asked to read one of two sets of instructions adapted from Stotland (1969). Observers in the <u>Empathy condition</u> were asked to concentrate on the actor's feelings and to visualize how he/she felt. Those in the <u>Observation condition</u> were instructed to watch the actor's behavior carefully.

The actor then drew a list of tasks from an envelope and, in the experimental conditions, was instructed to perform four tasks shown to be embarrassing by Apsler (1975) (e.g., dancing to recorded music, singing the



"Star Spangled Banner"). An offset control group was also included in the design of the experiment and the 14 male and female actors in this group performed Apsler's four nonembarrassing tasks (e.g., copying the words of the "Star Spangled Banner"). The 14 observers in the control group interacted with the actors under independence conditions and were given empathy instructions.

The observer's skin potential was recorded on a Narco-Bio physiograph during the actor's performance. Afterwards, both subjects were given questionnaires which asked them to rate their feelings on four eight-point bipolar adjective scales used to assess embarrassment by Modigliani (1971). They also rated their personal embarrassment on a 19-point scale, and, in addition, the observer was asked to rate on 19-point scales the extent of the actor's embarrassment and his/her sympathy and sorriness for the actor.

Results and Discussion: Checks on the manipulations showed them to be effective. The experimental actors reported considerably more embarrassment than the control actors, and observers in the empathy condition considered the actors more embarrassed than did those in the observation condition, ps < .05.

A multivariate analysis of variance on the observer's self-ratings on the adjective scales (i.e., at ease--self-conscious, poised-awkward, flustered-calm, and unembarrassed-embarrassed) revealed a three-way interaction of observational set, interaction-type, and subject sex, p < .01. The interaction was also obtained in subsequent analyses on the individual items, so, for convenience, the average of each subject's four responses--which also revealed the interaction, F (2, 58) = 5.11,



<u>p</u> < .01--is considered here. As Table 1 indicates, simple effects tests showed that the males' and females' self-ratings were affected differently by the competition conditions. Moreover, comparisons with the control group indicated that a number of observers--most notably the independence/empathy males and all the empathic females--reported significantly more embarrassment than did control observers. Despite maintaining their independence from the actors throughout the experiment, both males and females in the independence/empathy condition reported significant embarrassment in response to the actor's plight.

However, similar interactions of observational set, interaction-type, and sex, and similar patterns of means, were also obtained on the observers' ratings of their embarrassment, sympathy, and sorriness on the 19-point scales. From these data, it did not appear that any one of these reactions was predominant. Instead it seemed that the observers were simultaneously entertaining a number of related reactions, all of which could be reasonably expected to occur--feeling sorry for the actors, being sympathetic toward their plight, and being embarrassed by their predicament.

A measure of the physiological reactivity of the observers was obtained by scoring the number of shifts in skin potential exceeding four millivolts per second, and counting the number of such shifts occurring within successive 30-second time periods (cf. Buck et al., 1970). A quartic trend in these sums, F(2, 58) = 8.21, p < .01, indicated that the observers reacted strongly to each of the actors' four tasks, their skin potential jumping as each unlikely task began. Analyses of the subjects' mean reactivity scores—their average shifts across the seven time periods—revealed a main effect of interaction—type, F(2, 58) = 3.52, P(3, 58) = 3.52, P(3, 58) = 3.52, P(3, 58) = 3.52. The



means indicated that cooperative observers ($\underline{M} = 5.2$) reacted more strongly to the actors' behavior than did independent ($\underline{M} = 2.9$) or competitive ($\underline{M} = 3.8$) observers (by Duncan's test, $\underline{p} < .05$). Comparisons of the mean reactivity scores with those of the control group (Table 2) showed that only the observers in the independence/observation cell did not react to the actors significantly more than control observers did.

The interrelationships among these dependent measures were assessed by computing the within-cell correlations between them. As Table 3 indicates, the observers' perceptions of the actors' embarrassment were highly positively correlated with their own embarrassment and their feelings of sorriness and sympathy for the actor. In addition, as suspected, embarrassment, sympathy, and sorriness were all highly intercorrelated. However, the observers' self-ratings of embarrassment on the adjective scales were significantly correlated with their physiological reactivity, while their self-ratings of sorriness and sympathy were not. Moreover, their reports of embarrassment were more highly correlated with their reactivity than their sorriness was, t(70) = 2.29, p < .05. Thus, it appears that the emotional arousal which ac ompanied their observation of embarrassed others was more closely related to the state of awkward fluster described as embarrassment than to the state they described as sorriness.

Conclusions: Across the battery of measures, empathic observers generally did react more strongly to the actors' embarrassment than did nonempathic observers, and observers in the cooperation condition were often more affected by the plight of the actors than were observers who had competed with the actors or maintained their independence. Moreover,



independent, empathic observers watching embarrassed actors reported significantly more personal embarrassment than did similar observers watching unembarrassed actors. They seemed to experience an admixture of other emotions as well, reporting such reactions as sympathy and sorriness for the actor, but none of these reactions were as highly related to the physiological measures of their emotional arousal as were their self-ratings of embarrassment. The independence of actor and observer was maintained throughout the study, so it is doubtful that these observers felt that the others' actions reflected on them. In short, their reported embarrassment appears to be empathic embarrassment.

The results suggest that embarrassment is a rather omnibus phenomenon. The momentary threats to an actor's "face" from which embarrassment stems seem to influence both the actor and his/her audience; if the audience members can identify with the actor, they may themselves be embarrassed by the actor's predicament. The maintenance of "face" in social interaction seems to be such a central concern and such a precarious undertaking that envisioning oneself in the place of an embarrassed other may cause one to suffer empathic embarrassment.



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TABLE 1

OBSERVER'S AVERAGE SELF-RATINGS OF EMBARRASSMENT
ON THE BIPOLAR ADJECTIVE SCALES

Instructional	Interaction-Type					
Set	Cooperation	Independence	Competition			
	Male	s				
Empathy	3.4	4.6*	2,4 _{bc}			
Observation	2.9 _a	3,1	4.5 _{cd} *			
	Control Me	an = 3.4				
	Female	S				
Empathy	5.2*	4.7*	5.1 *			
Observation	4.9 *	4.1	2.5 _{def}			
	Control Me	an = 3.7				

Note. Means with the same single-letter subscript differ by at least p < .05. Means with an asterisk differ from their respective Control Means by Dunnett's test, p < .05.



TABLE 2
MEAN PHYSIOLOGICAL REACTIVITY SCORES;
CONTROL GROUP COMPARISONS

	•	
Cooperation	Independence	Competition
5.4 _a	3.9 _a	4.3 _a
4.9 _a	2.0	3.4 _a
	5.4 _a	5.4 _a 3.9 _a

Note: Means with a single-letter subscript differ from the Control Mean by Dunnett's test, $\underline{p} < .05$.

TABLE 3

PEARSON PRODUCT-MOMENT WITHIN-CELL CORRELATION COEFFICIENTS

AMONG THE OBSERVERS' MAJOR RESPONSES

		EMB1	EM82	SOR	SYM	ENJ	AVG	MAG
Actor's Emb	(ACT)	.364*	.314*	.337*	.366*	.163	.235	.204
Observer's emb								
Adjectives	(EMB1)	1.000	.535*	.536*	.341*	002	.261*	.204
16	(EMB2)		1.000	.664*	.406*	.172	.105	.043
19-pt. scale	(EMBZ)		1.000	.001	. 100	*.,_		
Sorriness	(SOR)			1.000	.590*	.195	.027	.060
							,	
Sympathy	(SYM)				1.000	106	.045	.040
						•		4,
Enjoyableness	(ENJ)		`			1.000	.208	` . 057
Skin Potential								
Mean reactivity	(AVG)					•	1.000	.661*
Magni tude	(MAG)	; •		•				1.000
mayni cude	(IIIAG)	j			•			

 $\underline{\text{Note}}.$ Coefficients with an asterisk are significantly different from zero by at least \underline{p} < .05.